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CLINICAL VERSUS ULTRASOUND PREDICTION OF MACROSOMIA IN DIABETIC PREGNANCY

Thesis submitted for partial fulfillment
of master degree in Obstetrics and Gynecology

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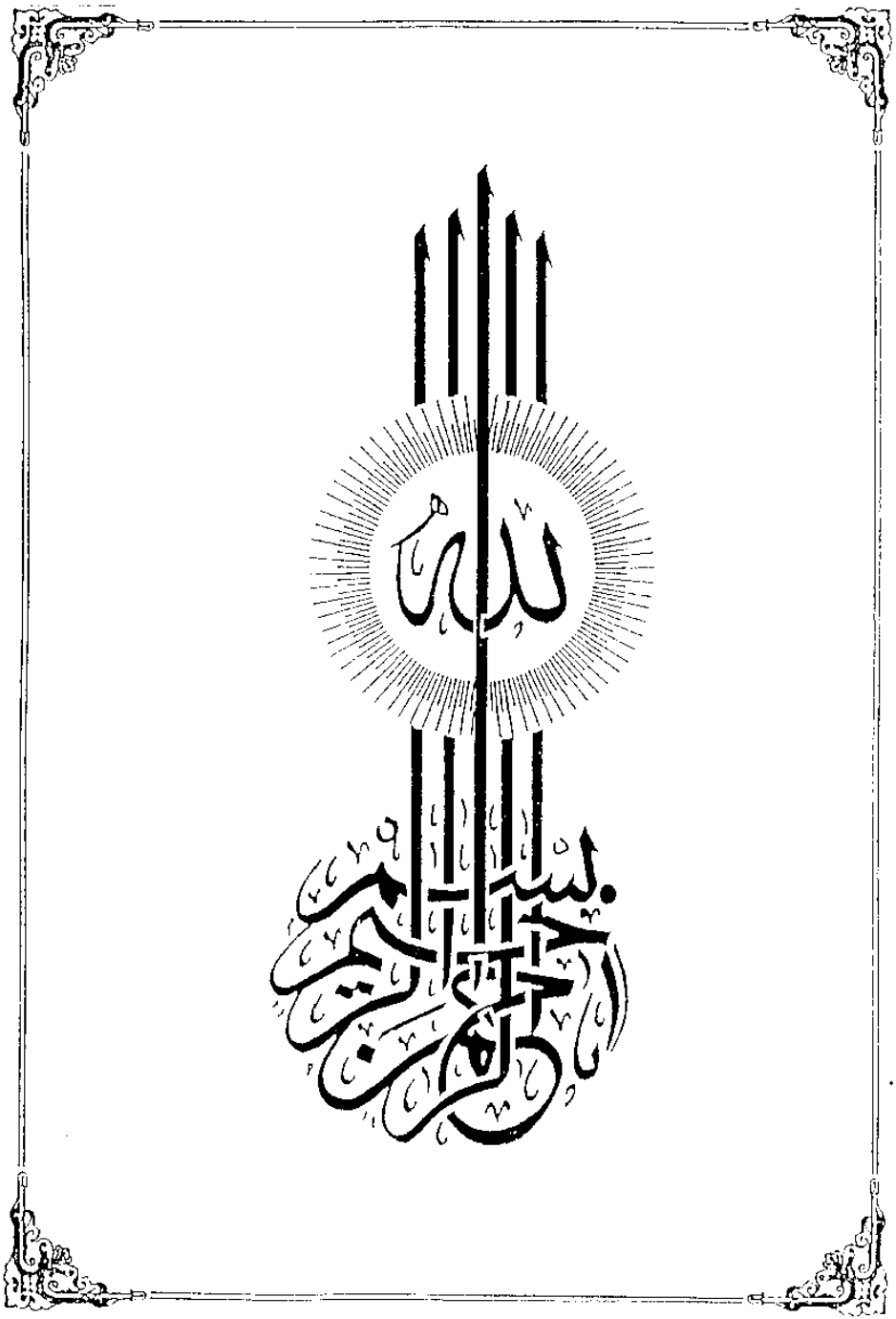

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INTRODUCTION

Introduction

Diabetes mellitus represents the most common medical condition causing complications during pregnancy (Landon , etal ; 1987) .
It is important to identify a pregnant woman with gestational diabetes mellitus because gestational diabetes is common and associated with significant metabolic alteration, increased prenatal and maternal morbidity and exaggerated long term morbidity among the mothers and their offspring (Cousins et al ., 1991).

Abnormalities of carbohydrate metabolism occur frequently during pregnancy and between 1-3 % of all pregnant patients will show glucose intolerance .The largest number of these patients with genetic or metabolic predisposition towards diabetes and who are capable of compensating adequately for diabetognic effects of pregnancy are patients with gestational diabetes , a smaller group is formed by women who had diabetes diagnosed before they become pregnant .One of the most frequent fetal complications of pregnant diabetic patients is fetal macrosomia (Arias ; 1993) .

The diagnosis of macrosomia occupies an important place in the contemporary thinking about diabetic pregnancy , this is partly , because of complications related to delivery and also because this provides some reflections of the effects of the maternal diabetic state on the fetus.
(Johnstone et. al ; 1996) .

INTRODUCTION

Failure to recognize gestational diabetes can be associated with an increased fetal death rate and greater prenatal morbidity including increased incidence of macrosomia , birth trauma , neonatal hypoglycemia , hyperbilirubinaemia , hypocalcemia and polycythaemia . (Jacobson & Cousins ; 1989).

Short term maternal morbidity includes an increased incidence of chronic hypertension , hydramnios and cesarean section (Cousins , 1987).Furthermore, patients with gestational diabetes are at increased risk for the onset of overt diabetes in later life . Thus establishing the diagnosis of gestational diabetes mellitus is important not only for prenatal outcome but also for the future of the mother (Landon et al ., 1986) .

Accurate estimation of birth weight in the macrosomic fetus is critical in the clinical management of labor ; birth trauma, prenatal asphyxia , and maternal morbidity are increased in patients with fetal macrosomia who are vaginally delivered (Hirata , et.al ; 1990) .

A more liberal use of cesarean section has been suggested to avoid these serious complications (Hirata, etal ; 1990).
Accurate antenatal diagnosis of the macrosomic infant of a diabetic mother should lead to decrease in prenatal morbidity. (Benson , et.al , 1987)

An enormous amounts of literature has built up around the prediction power of ultrasound measurement of macrosomia , studies have largely been based on

abdominal circumference or diameter but various different formulas have been tried (Johnstone et.al ;1996)
By the end of the pregnancy , clinical estimation and sonographic evaluation usually concur in the diagnosis of large fetal size (Arias ; 1993) .

AIM OF THE WORK

To compare the value of clinical versus ultrasound examination in prediction of macrosomia in diabetic pregnancy .

REVIEW OF LITERATURE